TABLE OF CONTENTS

EMPOWER KENTUCKY

Strategy	1
Appropriations	2
Methodology	3
Redesign Steering Committee	5
Activating the Process	6
Building Upon Other Efforts	7
Pool A Initiatives Illustrative	8
Agriculture Technology Restructure	9
Business Permitting and Licenses	11
Health Care Services	13
Families and Children	17
Tax Systems	23
Integrated Justice System	29
Financial Management System	31
One-Stop Job Services	34
Geographic Information Systems (GIS)	38
Kentucky Telelinking Network (KTLN) Interactive Video	40
Century Date Change	42
Motor Vehicle System	45
Statewide 800 Megahertz Digital Radio System	47
Summary	49

EMPOWER KENTUCKY

A Plan to Revitalize Government by Delivering Service and Results at Affordable Costs

Governor Paul E. Patton

"EMPOWER KENTUCKY" is Governor Patton's plan to rethink how state government is operating and how well it serves its customer, the citizens of Kentucky and itself. The goal of the Governor's EMPOWER KENTUCKY project is to build a state government organization that delivers by fiscal year 1998 efficient service at a cost substantially lower than current projections. This improved efficiency will be accomplished by investing available one-time General Fund revenues amounting to one-half of the General Fund balance at two intervals -- initially at April 15, 1996, and again at July 1, 1996 -- to redesign the processes through which government services supported by the General Fund are delivered, and by supporting this redesign with modern business systems and management techniques, including integrated, cost-effective information technology.

STRATEGY

This improved efficiency will be accomplished by investing available one time revenues to redesign the processes through which government services supported by the General Fund are delivered and by supporting this redesign with modern business systems and management techniques. Presently, information systems and equipment are scattered haphazardly throughout Kentucky government, thrown at isolated problems, and not working in unison. In fiscal year 1992, Kentucky state government investment in technology was the lowest in the Southeast at 0.58 percent of the budget. Kentucky government has been falling behind other states in its ability to use technology to more efficiently manage its responsibilities.

The <u>Budget of the Commonwealth</u> as enacted by the General Assembly for 1996-98 is predicated on the goal of achieving a structurally balanced budget, i.e., recurring annual

revenue receipts will be matched with recurring appropriations. A critical policy initiative embodied in that determination is that Kentucky state government can be made more efficient and effective by investing in business systems, modern technology, and through the development of a personnel system that will produce long-term savings to the Commonwealth. At the same time, it is recognized that certain capital expenditures are always necessary for life safety purposes and to maintain the state's investment in critical infrastructure. To ensure a structurally balanced budget, the <u>Budget of the Commonwealth</u> authorizes spending on business systems, the revision of the personnel system, and for necessary capital expenditures are based on the expenditure of cash. These policy initiatives have been integrated under the heading "EMPOWER KENTUCKY" - for **EMP**ower **O**ur **W**orkforce with **E**ffective **R**esources in Kentucky. The heart of the EMPOWER KENTUCKY initiative is the reengineering and technology-based initiative outlined in this document.

APPROPRIATIONS

As enacted, an initial appropriation of non-recurring General Fund dollars is authorized as one of two separate pools on a 50 percent/50 percent basis on April 15, 1996. Pool A will be utilized to implement the EMPOWER KENTUCKY program to be developed to identify necessary business systems and technology improvements for state agencies (including Constitutional Officers) to allow state agencies to become more efficient and effective and to help Kentucky achieve its goal of becoming a high performance state. Pool B, created at the same time, will provide General Fund cash support for selective, high priority capital projects detailed in a companion document.

A second phase, or tier, of Pool A (technology) and Pool B (capital projects) appropriations is authorized, on the same 50/50 percent basis, as a contingent appropriation dependent upon the existence of an undesignated fund balance as of June 30, 1996, that is above and beyond the

fiscal year 1995-96 projected balance discussed above. This next phase of the initiatives will be appropriated effective July 1, 1996.

Both phases (April 15 and July 1, 1996) of the EMPOWER KENTUCKY initiative will be appropriated from the capital budget for the Executive Branch as a new technology trust fund (Pool A). In order to achieve maximum savings in the proposal, both a current year appropriation and a fiscal year 1997 appropriation are authorized from the General Fund, including the unobligated balance.

Because the plan relies on cross cutting "horizontal" relationships that transcend traditional agency organizational lines, it will be necessary to deploy resources (appropriations) in the following manner: 1) the foremost criterion for individual project or process selection will be demonstrable cost savings on a recurring basis; 2) appropriations provided to Pool A can be directed to both the operating and capital budget of affected agencies; 3) the decision-making and priority setting responsibilities for allocating these funds are vested in the Secretary of the Executive Cabinet, upon advice and consultation with the new Redesign Steering Committee (described in more detail on the following page), and upon official authorization of the Secretary of the Finance and Administration Cabinet; 4) certain capital construction and major items of equipment statutes may need to be temporarily suspended or modified to accommodate the fast track approach envisioned by the plan; 5) regular oversight and reports will be required to be made to the General Assembly and its committees; and finally, 6) an element of the reengineering process necessary to achieve these lasting cost savings may include emerging personnel system initiatives.

METHODOLOGY

Two philosophies underlie this effort. First, state government exists to deliver appropriate services to the public. Second, state government employees are overwhelmingly professional

and dedicated to delivering service in the most efficient manner if properly supported through training, technology and appropriate management.

In keeping with these philosophies, service delivery can be made more efficient though the use of modern management techniques, strategic infrastructure investment and attention to the processes through which current services are delivered. These efficiencies will be created by using a process that begins with identifying the "customers" receiving services from the Commonwealth. The services received by each of the separately identified customer groups will be identified and traced back through the Cabinet structure, identifying at each step the work involved in delivering those services. The result of this analysis is a "process map" which will then be examined to determine how the delivery of the mapped services can be made more efficient through eliminating steps, reducing bureaucracy or unnecessary supervision, and supporting the work with proper technology. In addition, areas will be identified where technology can be used to gather information in one place that can be used by multiple programs, agencies and cabinets.

The process mapping will be performed by the people who actually do the work at each step of service delivery. Each cabinet will be trained to use a common process to do their mapping so that the approach will be uniform, and therefore equitable. Along with mapping the processes used to deliver their services, the analysis teams will be expected to come up with suggestions as to how to make their work more efficient and better for both the receiving "customer" and their own work group. Outside consultants will be necessary to support this effort. This support will consist of training the teams in the proper methodology, facilitating the effort, helping the group establish deadlines and organizational structure and enforcing the deadlines. The outside consultant will not be responsible for imposing the ultimate service delivery structure adopted by the working groups. Neither will the outside consultant be responsible for establishing the goals of the groups. In fact, no specific personnel reductions will be imposed.

There are two reasons why specific personnel reduction goals will not be imposed on the process mapping and redesign groups. First, the goal is to design the most efficient and productive process and this will differ from department to department, program to program. To impose an arbitrary goal in advance would be to second guess and artificially mold the efforts of the group itself. Second, the goal of the process is to achieve employee ownership and buy in, as the service delivery processes are made more efficient, by offering the employees the opportunity to design a system where they can be better supported in their professional efforts. Rather than impose an arbitrary personnel goal, this ownership can best be achieved by offering incentives to design the most efficient process that will gain the most savings and productivity increase for the Commonwealth.

The limited funds available in the pools supporting this project form the basis of the incentives offered to encourage widespread participation in this effort. The need for technology can be endless -- the funds available to support these needs are very finite. As a result, not all redesign efforts can be supported, even though they may result in savings to the Commonwealth. Which efforts will be supported initially will be determined through a competition for available funds based on the cost/benefit analyses performed by the redesign groups. Constitutional Officers are also eligible for consideration and financial support.

REDESIGN STEERING COMMITTEE

The evaluation of these cost/benefit analyses will be performed by a Redesign Steering Committee. This Steering Committee is made up of ten members and will include the Secretary of the Executive Cabinet, the Deputy Secretary of the Executive Cabinet, the Director of the Governor's Office for Policy and Management, the Secretary of Personnel, the Executive Director of the Kentucky Information Resources Management (KIRM) Commission, the Commissioner of the Department of Information Systems, and two representatives each from the House of Representatives and the Senate. It shall be the duty of this Committee to evaluate proposals for redesign based upon criteria communicated in

advance to the Cabinets and Constitutional Officers. In addition, the group will remove roadblocks encountered by the working groups, assist in providing resources as needed, ensure that efficiencies that cross current Cabinet lines are explored, and approve and facilitate implementation of the final process redesign.

ACTIVATING THE PROCESS

The effort described above is a detailed and therefore lengthy process, about which much remains imprecise until the process itself is undertaken and underway. The ultimate responsibility for managing the process rests with the Governor -- working through the Secretary of the Executive Cabinet. It must begin with the selection of an outside consultant which, to insure the timely return on investment, must be done immediately. Therefore, it is recommended that immediate approval of funds be granted which should enable a Request for Proposal process and preliminary organizational activities to begin.

In addition, a pool of funds is authorized to be used to invest in projects such as the ones documented in the following project descriptions. The projects described are designed to show areas of focus and representative projects. They are not submitted to be approved in their particular current form.

Employee training and education will be critical components of this effort and are factored into the cost projections of the technology initiatives. The training will include application, hardware and software workshops typically associated with accepted automation practices. However, consistent with reengineering principles, this initiative will go far beyond the normal training horizon. For this effort to be successful, buy-in and participation from the workforce is essential. Too often in the work setting, employees toil repetitively at their tasks which comprise only a portion of the entire work product or end result the organization is trying to achieve. Employees may or may not understand the goal they are trying to reach; they may or may not follow the current workplace guidelines if they do not understand why doing so is important. Teamwork and understanding of the organizations' goals and work products must be achieved by involving and educating employees at every level of the process. Management will be challenged to foster the teamwork concept and promote a workplace that encourages employee participation.

BUILDING UPON OTHER EFFORTS

The underlying concept of this plan is not new. Private industry and some other state governments have realized the need for change and have begun the process of improving their services, and realizing the benefits of efficiency. In the Commonwealth, considerable study of Kentucky government operation and organization has already been conducted by groups such as the Quality and Efficiency Commission, the Long-Term Policy Research Center, and the Kentucky Information Resources Management Commission (KIRM). These groups have identified a pressing need and unrealized potential for our Commonwealth.

The following capsule descriptions of information system projects and major items of equipment are derived from budget requests and KIRM/Capital Planning Advisory Board recommendations. These should be considered as illustrative, and are not necessarily authorized for funding as individual priorities or line-items at this time.

Governor's EMPOWER KENTUCKY Plan for FB 96-98 (Pool A)

The Governor's EMPOWER KENTUCKY Plan for the Commonwealth includes thirteen (13) initiatives. Initiative XII, Motor Vehicle, is a part of the Plan, but the funds were requested by the Revenue and Transportation Cabinets.

	Source of Funds						
	Initiative	General	Federal (a)	Road	Other(b)	Special (c)	Total
ī	Agriculture Technology Restructure	3,759,000					3,759,000
I II	Business Permitting and Licenses	9,190,000					9,190,000
III	Health Care Services		10 404 000			1,412,000	
		8,193,000	19,494,000			1,412,000	29,099,000
IV	Families and Children	31,657,000	30,950,000				62,607,000
V	Tax Systems	27,905,000					27,905,000
VI	Integrated Justice System	17,168,000					17,168,000
VII	Financial Management System	42,350,000					42,350,000
VIII	One-Stop Job Services	776,000	3,619,000			1,034,000	5,429,000
IX	Geographic Information Systems	2,460,000	2,200,000				4,660,000
X	Kentucky Telelinking Network	1,556,000					1,556,000
XI	Century Date Change	4,508,000		1,055,000			5,563,000
XII	Motor Vehicle System			17,006,000			17,006,000
XIII	Statewide 800 MHZ Digital Radio				42,000,000		42,000,000
	TOTALS (d)	149,522,000	56,263,000	18,061,000	42,000,000	2,446,000	268,292,000

a Based on estimates of current programs.

This is not a priority listing, nor is it a firm recommendation. The initiatives are illustrative only.

b Other funds represent unidentified funding source at this time, may include bonds.

c Special funds include local and private fund sources.

In many of these intiatives, operational costs have not been included. It is assumed, with the reengineering efforts, operational costs for the new systems will be less than or equal to the current operational costs.

I. AGRICULTURE TECHNOLOGY RESTRUCTURE

Application Description

This initiative involves a complete restructuring and reengineering of all activities and processes within the Department of Agriculture from field activities to administrative functions in central offices. Agriculture has already undergone the business process reengineering effort with the aid of a consultant, and is ready to incorporate that plan into their operations. The first phase of the project will be to build the technical infrastructure within central offices in Frankfort and installation of a local area network. This will allow connectivity between all divisions and the state system. The second phase will provide mobile technology to field staff. The reengineering efforts of Agriculture will provide a vital communications link between field staff, via the Kentucky Information Highway, and central offices.

Costs

	<u>FB 96-98</u>
Systems Design, Implementation, and Training	3,290,000
Capital Outlay	469,000
TOTAL	3,759,000

Benefits

This project is critical to the success of reengineering efforts undertaken by the Department of Agriculture to reduce duplication, streamline government operations, and provide a communications infrastructure between central office and field staff, which will result in more efficient and effective use of government services and resources. This technology will allow a 30 percent increase in the number of

inspections processed without additional staff. Travel can be reduced by 30 percent in use of state vehicles, and 40 percent in the use of field personnel vehicles. Savings will also be realized in reduced postage costs across the divisions.

Related Efforts

This initiative supports the Business Permitting and Licenses initiative (II), and will fund the Agriculture Technology Restructure System as outlined in the operational and capital budget for the Department of Agriculture.

II. BUSINESS PERMITTING AND LICENSES

Application Description

The objective of this initiative would be to facilitate the inquiry, submission and tracking of requests for business permits and licenses. The system would allow citizens and business interests to (1) submit applications from their home or business, (2) track their requests through the various approving agencies, and (3) provide a single entry point for all permits and licenses (one-stop shopping). The system would rely on remote electronic submission and inquiry via Internet and the Kentucky Information Highway.

Currently, for example, an individual establishing a retail business may be required to visit two or three state or local agencies to obtain and complete licenses and permits, i.e., Natural Resources, Revenue, Health Services, etc. With the new "one-stop" approach the individual establishing a retail business could access the system locally or in various Frankfort locations to (1) determine the various types or permits or licenses required, (2) prepare applications electronically and (3) track the approval process of the applications.

Current situation:

- Limited electronic submission for permits/licenses
- Limited remote inquiry of request approval process
- Aging systems
- Labor intensive and paper-based solutions
- Time intensive due to widely divergent agency requirements and physical locations

Costs

	<u>FB 96-98</u>
Reengineering Process	1,700,000
Systems Design and Implementation	5,000,000
Capital Outlay	2,055,000
Training	435,000
TOTAL	9,190,000

Benefits

- Reduces the turnaround time and makes it easier for businesses and citizens to apply for and be granted permits and licensing
- Expedites the approval process by minimizing reliance on paper-based solutions
- Promotes higher public visibility

Related Efforts

This initiative incorporates portions of the Natural Resources and Environmental Protection Cabinet Permitting Systems budget - Imaging Project, the Department for Libraries and Archives Record Format and Conversion project, and builds upon the Department of Agriculture's Technology Restructure System.

III. HEALTH CARE SERVICES

Application Description

The Cabinet for Health Services' (CHS) mission is to provide and promote the necessary programs to support the overall policy direction for health services for Kentuckians. In this effort, direct services are provided, e.g., primary care by local health departments and patient care in mental health facilities; health care services are monitored, e.g., nursing care facility and drug store inspections and disbursement of federal moneys to health care programs supported by other health care providers. In this health care system, a wealth of data is collected, but much of this data is duplicative and has limited sharing capability between the agencies and cabinets.

In order to have information available as a basis for making solid and economical health service decisions, and to streamline the acquisition of direct services by the clients, a reengineering effort may include: re-design of the Local Health Network to include elimination of redundant data collection; connectivity for all local health and mental health department facilities to the Kentucky Information Highway (KIH); use of smart card technology to support expansion of primary care in the local health departments in conjunction with the Assistance Programs initiative; collaboration with the Natural Resources and Environmental Protection Cabinet on common environmental issues, especially those involving businesses; and a laboratory management system that will facilitate prompt and accurate results.

Information collected by CHS, or the services monitored by CHS, should be available to other governmental agencies and private sector entities. Individuals, school systems, universities, businesses, and other government programs make decisions based on data compiled and generated by health care entities.

Envisioned in this project are two important missions of Health Services: a health program information and dissemination initiative and the public health center initiative. Achieving connectivity to the KIH for all public health care facilities, e.g. local health departments, mental health facilities, comprehensive care centers, and schools would allow immediate communication and information dissemination regarding programmatic emphasis. Through Internet development, the Cabinet for Health Services can support private health care providers and the general public with preventive health care education. Results of data collection initiatives and appropriate data elements can be shared electronically with interested parties using KIH and a data warehouse concept (a database that consists of extraction of data from other sources and designed for general access).

With electronic system design and connectivity, the local health department becomes a focal point in the expansion of the primary care management concept; more citizens will make use of the health departments as the "birth to death" concept is further implemented; data availability becomes immediate. Copies of birth and death certificates can be issued locally; immunization records can be accessed from another county; lab test results can be transmitted to local health departments and physicians; sanitation inspection results can be available to businesses and citizens; patient demographic records can be retrieved by a state mental hospital; and appointments can be made for community aftercare for the mental health patient.

Costs

	<u>FB 96-98</u>
Reengineering Process	2,000,000
Systems Design and Implementation	15,000,000
Capital Outlay	
Server Complex	2,813,000
Infrastructure	1,688,000
Workstations (1,125)*	6,750,000
Training	848,000
TOTAL	29,099,000

* Additional workstations may be needed for the 4,000 employees in the Local Health Departments.

Benefits

- A reduction of costs for providing health care services
- Programmatic decisions would be made upon more current and comprehensive data
- Health care providers could make better informed decisions through analysis of data available electronically by CHS
- Primary care clients could be served more promptly by the local health departments and mental health facilities

Related Efforts

CHS currently has a project within its Department for Health Services (DHS) to identify the information needs of DHS and the potential reengineering efforts needed to enable the agency to do business in the health care arena in the future. The project

will produce a blueprint of what information the agency needs to collect and how business operations should be structure using the information to fulfill the mission of the agency. This phase of the project costs approximately \$130,000. The cost for Phase Two of the project is still undetermined. The agency plans a modular implementation approach of the project's blueprint by issuing multiple Request for Proposals.

The Cabinet also has proposed two projects to address the system needs of the county-based health departments and the programmatic network they represent. One project, the Local Health Network Infrastructure (38-733-E001) would replace the current outsourced communication network with the Kentucky Information Highway network. A second project, the Local Health Network (38-733-E601) would address the programmatic needs of the local health department and the Cabinet for Health Services.

IV. FAMILIES AND CHILDREN

Assistance Programs

Application Description

The Assistance Programs must be focused on measuring outcomes and identifying "best practices" that provide a return on public investment. To facilitate these goals and to provide a "family approach" to assistance, a flexible, integrated mode of service identification and delivery is needed. A reengineering effort would envision a "one-stop shopping" approach for applicants to apply for assistance, linkages among all assistance program areas to allow sharing of demographic information and to ascertain all benefits being received for a given client. An investment in electronic benefits transfer of funds (EBT) and smart card technology would facilitate the service providers' identification of eligible clients and minimizing fraud and abuse.

The electronic support for assistance programs currently spans multiple cabinets with limited or no interaction among the programs. Programs include: the Kentucky Automated Management and Eligibility System (KAMES), with functionality for eligibility and benefit determination in the areas of Food Stamps, Income Maintenance, Aid to Families with Dependent Children (AFDC), AFDC-Related Medical Assistance, Adult Medical Assistance, State Supplementation and Hospice; Medicaid; Kentucky Child Support Enforcement (KASES); Job Training and Partnership ACT (JTPA); Women, Infants and Children (WIC); the School Lunch Program; Family Resource Centers; and Workers Compensation. All of these areas are, or will be, connected to the Kentucky Information Highway (KIH).

Envisioned is a client who would meet with programmatic staff, either at an office or through outreach, to apply for assistance. The client would complete a unified eligibility form, and immediately learn of his/her eligibility for assistance and be issued a Commonwealth Benefits Card. The determination of what services this client and family is in need of can begin immediately, with emphasis on meeting basic needs and planning for future economic stability. Appointments for the client, as well as sharing of appropriate demographic data, can be made electronically at supporting agencies, such as the local health department, the KERA family resource center, vocational school, legal aid, vocational rehabilitation, and the local schools. The Commonwealth Benefits Card, with swipe/smart technology, can be used by the client at the local grocery store for groceries and WIC food supplements, for doctor visits, immunization records, school breakfast and lunch program eligibility, public housing eligibility, and training program eligibility.

Costs

	<u>FB 96-98</u>	
Reengineering Process	3,000,000	
Systems Design and Implementation	18,000,000	
Capital Outlay		20,000,000
(Cost for providers is not included)		
Training	1,230,000	
TOTAL	42,230,000	

Benefits

- A managed approach to assistance would be facilitated, whereby benefits to clients would be more easily ascertained and outcomes could be better coordinated and measured
- The "one-stop shopping" concept would facilitate integration of client tracking and referral systems to eliminate redundant data

- A significant benefit to the client would include more rapid determination of eligibility and enrollment in all assistance programs with the convenience of one office visit
- Providers would benefit from immediate information on eligibility of clients
- A reduction in client and provider fraud would be recognized by EBT and electronic card technology
- Electronic cards afford the client dignity in the payment process

Related Efforts

There are two projects being pursued using electronic card technology: 1) a stripe card project being driven by the Southern Alliance of States (SAS) for the Kentucky Department for Social Insurance (a contract has been awarded to Citicorp for the eight states in SAS); 2) a smart card project by the Department for Medicaid Services in response to House Bill 250. (This study is to see how the smart card can be more effective than the "point of sale effort" that is now included in Medicaid. Besides eligibility information, this smart card pilot includes medical information on the client as well as picture identification.)

This initiative incorporates the Department of Social Services Point of Sale Devices and Telecommunications and Child Support Replacement Equipment budgets.

TWIST

Application Description

The Worker's Information SysTem (TWIST) is an automated social services case information system covering all major programs that provide family-based services. This includes programs such as child protection, foster care, adoption, child day care, family preservation, juvenile and adult protection, guardianship, residential for youth, and after services for those youth when they are discharged from placement. Since workers provide service delivery to families at all times, and spend the majority of their time away from their offices, workers should be provided with the capability to access case information 24 hours per day, 7 days per week. Another important component of TWIST is the concept of workload measurement. To function as a fully integrated and functional case information system, the system needs to be able to assign and assess workload of case workers. TWIST is designed primarily to support the work of the social worker with the belief that, if the worker's needs are supported, clients will be better served and necessary management information can be obtained.

Currently, there is little automation in the local offices. Automation is primarily limited to word processing. Case documents and all information related to a case are maintained manually in case folders by the worker. A worker must manually complete many documents. For example, there are 200 forms/reports that must be completed for various cases. To place a child in foster care and receive authorization for federal IV-E funding, a worker must complete 27 forms. With the implementation of TWIST, case information will be kept electronically. Repetitive information will be retrieved from the system and the worker will have to enter information only once.

Costs

	<u>FB 96-98</u>
Systems Design and Implementation	6,900,000
Capital Outlay	6,150,000
Training	627,000
Ongoing Operational	6,700,000
TOTAL*	20.377.000

^{*} Current project funding of \$11.1 million to support systems development efforts for TWIST is not included in the above figures. Funding will be provided by a 50/50 federal-state funding authorization.

Benefits

- TWIST will provide workers the opportunity to deliver an improved quality of service to clients through an increase in the amount of time actually spent with clients as opposed to time spent on paperwork. This redirection of staff energies will improve both service delivery and decision-making.
- Families will be better served because workers will have more readily accessible client information upon which to base decisions

Related Efforts

A major development effort is currently in process for TWIST. The former Cabinet for Human Resources contracted with a vendor for the design, development, and implementation of TWIST. Pilot implementation is scheduled for April, 1996, with statewide implementation being completed by August, 1996.

Because of budget limitations, and with federal enhancement moneys being restricted to child welfare, the current development effort is restricted to child protection, foster care, adoption, family preservation and juvenile services. More ambitious and expensive programs to include the entire family, i.e., adult protection, residential and child day care, are not being provided in the current TWIST development. Budget constraints have also impacted the acquisition and installation of hardware by local offices. It was originally envisioned that all workers would be provided with a workstation to access case information immediately. Also, a significant number of laptops would have been available for workers to access TWIST away from the office. The number of workstations and laptops have been considerably reduced to less than half of what was envisioned. (A budget that was once projected to be approximately \$30 million has now been reduced to \$11.1 million.)

V. TAX SYSTEMS

Tax Gap Management System Pilot (TGMS)

Application Description

The TGMS initiative is aimed at demonstrating the viability of employing new technology in the Kentucky Revenue Cabinet (KRC) to radically change the way compliance programs are administered. The Tax Gap Management System is designed for closing the gap between taxes rightfully due the Commonwealth and taxes actually paid. Phase One of the pilot project would be conducted during calendar year 1996.

For the most part, the compliance programs to be conducted in this pilot are programs which have been conducted previously through manual processes on an ad hoc basis. The pilot project will expand the scope of those compliance efforts by including a greater variety of data. The project will enhance process effectiveness by shortening the cycle time for problem identification and resolution. The goal is to demonstrate the effectiveness of using new technologies in automated, integrated systems for query, data management and correspondence.

Costs

	<u>FB 96-98</u>
Systems Design and Implementation	300,000
Property Tax Audits	868,000
Capital Outlay	304,000
Training and Operational	1,028,000
TOTAL	2,500,000

Integrated Tax Compliance System

Application Description

The Revenue Cabinet has been attempting to pursue an "integrated tax strategy" since the mid-1980's. Substantial progress has been made in identifying all major business taxpayers with a single identification number and registering these taxpayers using a common business tax application. The collection system and the accounts receivable system process all of a taxpayer's accounts under a case concept to provide consolidated information regarding payments, bills and transaction history.

However, each of the individual taxing authorities has taken its own unique approach to taking advantage of improvements in technology. These separate approaches have improved tax compliance and taxpayer services to some degree, but they have also made it more difficult to gather and assemble meaningful information in a unified manner. By creating an integrated tax system to consolidate administrative functions, there would be a reduction in redundant information, a reduction in the cost of maintaining duplicated information, an increase in tax collections, and a significant improvement in the quality and integrity of information available. Other states developing integrated tax systems are: Tennessee, Colorado, North Carolina, Florida, California and Mississippi.

Future development will require an initial business reengineering study to determine the best changes to business processes. Project completion is projected to encompass a four year timeframe. This should be followed-up with a requirements study to clearly define what is needed in the future integrated tax system. This will provide a good road map to take the Revenue Cabinet into the next century and also provide a detailed cost estimate for this development. Possible outcomes could include: a greater coordination of processes with the Federal government involving filing times, regulations and policies; a reduction in the number of minor taxes the Revenue

Cabinet administers; a standardization of tax administration for each tax and consolidation of returns through a mail packet concept.

Technologies which hold promise for future inclusion in the Integrated Tax System include: Electronic Data Interchange (EDI), Electronic Tax Filing, Electronic Funds Transfer, Voice Technologies, Imaging, Data Warehousing, Client Server, and the Internet.

The integrated tax system would consolidate the functions needed for effective tax administration to serve Kentucky taxpayers. Functions would include taxpayer identification and registration, automated case management, auditing, compliance of filed returns and payments, return processing, imaging returns and documents, collections, accounting, correspondence, internal agency alerts and reporting. The integrated tax system would also include a tax gap component which would greatly aid in the identification of non-registered taxpayers. This would allow electronic matching of federal data, state data, public access data, credit data and credit card information.

Currently, tax return processing is being redesigned to significantly alter the way the Revenue Cabinet performs this function. This function has remained unchanged for more than twenty years. After a business process reengineering study, recommendations are being implemented to allow employees to work in teams to more quickly process returns. Imaging and character recognition technologies will be used to improve this process. These costs are included in the estimates below.

The new system would provide a tax examiner a complete picture of all tax information for a taxpayer at the touch of a keystroke. An auditor would be able to see a profile of similar taxpayers to judge the reasonableness of a taxpayer's income and deductions. A taxpayer would be able to receive an "easy to understand" statement showing all payments, filed returns, and other transactions. In addition, a taxpayer

having trouble completing his tax return could consult a list of frequently asked tax questions on the Internet.

Costs

	<u>FB 96-98</u>
Reengineering Process	2,245,000
Systems Design and Implementation	16,500,000
Capital Outlay	4,000,000
Training and Operational	2,660,000
TOTAL	25,405,000

Benefits

- Timely and responsive tax return processing
- Improved ability to continually assess taxpayer compliance
- Reduction of personnel costs, physical storage costs for documents, a better utilization of electronic storage, and reduced office space
- Increased compliance and tax gap efforts will result unofficially in estimated additional revenues of approximately \$20 million annually for the Commonwealth
- Increased accessibility of taxpayers' payments for the Commonwealth through electronic fund transfers
- Faster and easier response to the citizens due to electronic business tax applications
- Easier access to the tax help manuals via the Internet
- Information sharing of financial data
- Streamlining of workload for Revenue Cabinet employees

Related Efforts

This initiative includes the Tax Return Processing, Integrated Tax System design and implementation, Statewide Infrastructure, and Security operational and capital budget requests of the Revenue Cabinet. KRC currently has 16 separate mainframe tax systems and several PC-based subsystems which developed over several years in response to programmatic requirements. It is incumbent upon the Cabinet to employ technologies through an "enterprise" approach which will enable the agency to "work smarter."

The objectives of integration are to 1) improve the association of related information in the Cabinet; 2) provide quick and reliable access to taxpayer information and profiles; 3) introduce state of the art technology to legacy systems; 4) reengineer and automate tax return processes; 5) add appropriate security to all systems and tax information; and, 6) secure a proficient technological infrastructure to maximize the benefit of an integrated tax system.

VI. INTEGRATED JUSTICE SYSTEM

Application Description

The objective of this initiative would be to facilitate the inquiry and tracking of individuals who enter the Justice system at either the local or state level. The new system would replace existing systems including parole, corrections, victim notification, and court administration. The system would provide executive management, legislative leaders, corrections personnel, law enforcement, and court administrators with readily available and timely access to essential Justice information.

Presently, information is duplicated and may be lost between law enforcement, the courts, and correctional facilities as a felon is arrested at the local/state/federal level, tried in the state/ local courts, incarcerated, probated or paroled, possibly entailing victim notification of parole. Within the scope of the proposed system, information gathered during any phase of the justice process would be carried without duplication or danger of being lost.

The system's scope would be comprised of the following modules:

- Parole Tracking and Administration
- Corrections and Inmate Tracking
- Victim Notification
- Local/County Jail
- Court Administration
- Law Enforcement

Current situation:

- Systems reflect individual agency priorities
- Aging systems

- Labor intensive
- Systems are not user-friendly
- Limited information
- Lack of a comprehensive/strategic Justice plan

Costs

	<u>FB 96-98</u>	
Reengineering Process	2,250,000	
Systems Design and Implementation	11,250,000	
Capital Outlay		2,850,000
Training	818,000	
TOTAL	17,168,000	

Benefits

- Results in more responsive law enforcement, improving safety to the citizens
- Responds to the shift of Federal responsibilities to the state level
- Provides single point of access to multiple systems
- Provides more accessible corrections information

Related Efforts

This initiative will build upon the Kentucky State Police's LINK "Law Information Network of Kentucky" project.

VII. FINANCIAL MANAGEMENT SYSTEM

Application Description

The objective of this initiative would be to replace the existing accounting-oriented system with a comprehensive, fully integrated, real-time Financial Management System, which would operate under an enhanced client oriented environment. The system would be based on electronic document interchange, electronic funds transfer, and imaging and communications utilizing the Kentucky Information Highway and Internet. The system would allow executive management, legislative leaders, auditors, vendors, and agency personnel timely access to required financial information.

Currently, executive branch management cannot review spending patterns or details of a governmental unit without detailed account code knowledge. There is also a lack of flow of financial information from budget to accounting to fixed asset and purchasing. The new approach would not only provide access for review by executive branch managers of detailed spending patterns of governmental units, but would join major administrative functions of accounting, budgeting, purchasing and payroll/personnel information.

The system's scope would be comprised of the following modules:

- Accounting
- Purchasing
- Fixed Assets
- Payroll/Personnel
- Budgeting
- Investment Tracking
- Revenue Forecasting

- Cash Management
- Executive Information System

Current environment:

- Limited management information (more accounting oriented)
- Labor intensive processes
- Aging systems
- Reflect agency priorities and direction
- Not user-friendly

Costs

	<u>FB 96-98</u>
Reengineering Process	3,000,000
Systems Design and Implementation	33,750,000
Capital Outlay	5,100,000
Training	500,000
TOTAL	42,350,000

Benefits

- Improves management decisions by making information more accessible
- Supports current initiatives for state downsizing of personnel
- Responds to the shift of federal responsibilities to the state level
- Promotes easier access of financial management and budgetary information
- Possibly improves bond rating
- Expedites vendor payments

Related Efforts

This initiative will incorporate the Finance/Controller's Electronic Commerce project, the Personnel Cabinet Electronic Employee File system, and the Auditor's Office Local Audit Financial Network Pilot Program.

VIII. ONE-STOP JOB SERVICES

Application Description

Kentucky's vision of the One-Stop Job Services System begins by looking to future needs. The system we plan today must be capable of staffing the workplace of the 21st Century. The One-Stop Job Service System will be implemented based on input from various state government agencies including: Workforce Development, Education, Labor, Agriculture, and Human Resources, as well as local elected officials, community and business leaders, and representatives of volunteer organizations. Subject to the core services common to all areas, the mix of services and locations of the one-stop service delivery will be tailored to meet local needs based on available resources.

Historically, each federally funded employment and training program has established its service requirements and related definitions independently. Consequently, related programs collect client information in substantially different ways. A user friendly One-Stop Job Service system will allow clients from all state programs such as: Vocational Rehabilitation, Job Training and Partnership Act (JTPA), Job Opportunities and Basic Skills (JOBS), Adult Education and Literacy, Dislocated Workers, Universities, and Employment Services to browse menus of available labor market, job placement, training and support services, regardless of which program collected the information. However, the system will not replace nor reduce the central focus of person-to-person service delivery.

For example, a JTPA applicant who is looking for a job could go into any local office and complete a comprehensive application form. Consultation with a counselor would determine his/her existing job skill set and the availability of all jobs from any program area with requirements for this skill set. If the applicant's existing skill set

does not meet current labor market requirements, the counselor could determine the training available to enhance his/her basic skills and make him more job ready. Currently, a JTPA applicant can only apply for JTPA training. If he/she qualifies for services from any other programs, such as Vocational Rehabilitation, Dislocated Workers, Adult Education or Employment Services, he/she would be required to go to another office, complete a new application, and interview with another counselor.

Costs

	FB 96-98
Reengineering Process	1,070,000
Systems Development and Implementation	2,800,000
Capital Outlay	1,300,000
Training	259,000
TOTAL	5,429,000

- Promotes effective partnerships among government agencies, business, industry, volunteer service groups and organized labor
- Links all agencies in the school-to-work initiatives, including the community colleges and vocational schools
- Assists clients to move from the welfare rolls to productive, taxpaying citizens
- Removes identified barriers to coordination and integration of services across employment and training programs at the state and local levels
- Enhances program planning and oversight capability at the federal, state, and local levels

- Facilitates integrated client tracking and referral systems to eliminate capturing of redundant data
- Removes barriers to efficient customer service
- Develops a more versatile workforce by providing retraining services to accommodate continuously changing job requirements
- Reduces Unemployment Insurance tax rates for employers due to a more stable workforce

Related Efforts

These initiatives were implemented by local governments in cooperation with the private sector:

- Louisville/Jefferson County Job Link
- Owensboro Career Service Center
- Lexington/Fayette County Mayor's Training Center

These programs were developed by the Department of Information Systems (DIS) for the Workforce Development Cabinet using funds available through Federal grants:

- Workforce Development's Unemployed Worker Profiling and Re-employment Services System
- Workforce Development's Dislocated Worker Program

DIS is developing these programs for the Workforce Development Cabinet and will implement during the first half of 1996:

- Workforce Development's Assessment Consortium for Kentucky Technical and Adult Education, Vocational Rehabilitation, Department of the Blind, and Private Industry Council is currently being developed with funds from Federal and state governments and the private sector.
- Workforce Development's Performance Measurement Reporting Information System is currently being developed using funds from a Federal grant.

IX. GEOGRAPHIC INFORMATION SYSTEMS (GIS)

Application Description

The State Office of Geographic Information's intent is to build a shared basemap that can meet the needs of its users and establish a foundation, with known positional accuracy, to which all users can tie their data collection and analysis activities. The savings to government and the private sector in Kentucky in using a common basemap, avoiding duplication, and encouraging standardization of GIS assets are key forces behind this initiative.

The proposed plan for implementation of the "Statewide Digital Basemap" over the biennium and succeeding years is to acquire a "base image layer" of 1:12,000 scale Digital Orthophoto Quarter Quads (DOQQ's) to be used as a common basemap. This series of digital photographic products is used as a backdrop for adding features or correcting existing line maps. The basemap will be used to create or build a set of five thematic layers of maps that will meet the current and future needs of state government, local government, and the private sector. This statewide strategy, adopted by the Council on Geographic Information Systems, reflects the most current trend in the acquisition and development of a GIS land base. The final electronic product is a continuous tone image basemap with one meter resolution.

Statewide Digital Basemap usage includes: transportation planning, land use management, forestry information, availability of utility and railway lines. State, local, and private entities can utilize basemap information for economic development efforts relative to marketing local properties to prospective private industry clients. The GIS project is an equal partnership between the Commonwealth and federal agencies such as the United States Geological Survey.

Costs

FB 96-98

Capital Outlay

4,660,000

Benefits

This project will provide significant savings to government and the private sector in using a common basemap, avoid duplication, and encourage standardization of Geographic Information Systems (GIS) assets. The initiative will build a shared basemap that can meet the needs of its users at the state, federal, local, and regional level. A common basemap will reduce the cost of developing GIS applications and promote data sharing. Access to the basemap will be made available to the public domain.

X. KENTUCKY TELELINKING NETWORK (KTLN) INTERACTIVE VIDEO

Application Description

The KTLN is a partnership between State Government, K-12 Education, and Higher Education to provide interactive video capabilities for the purposes of distance learning, video conferencing and telemedicine applications. The Commonwealth, through KTLN, was the recipient of a Federal Star Schools Grant that was worth \$8 million over two years to be matched by \$8 million in state and local funds. When this initiative is complete, the Commonwealth will have approximately 110 video centers primarily serving education programs. It is recommended that state government continue to expand the KTLN by establishing video centers in regional state government office complexes, state parks, and selected state institutions. These video centers would be used to conduct employee training, video conferencing, parole hearings, business meetings, video depositions, etc. Exact locations would be determined through an application evaluation process whereby interested agencies would detail their business case and demonstrate a commitment for the operation and marketing of video facilities.

Costs

	<u>FB 96-98</u>
Capital Outlay	
Video Equipment	1,120,000
Room Re-design	160,000
Training	74,000
On-going Operational	202,000
TOTAL	1,556,000

- Increased cost savings to state government with additional video locations by decreasing travel expenses, affording remote access to central office, training opportunities, and distance learning
- Increased communications and access between state government, local officials, business and industry
- Reduce the transport of prisoners by implementing video parole hearings, thereby reducing security concerns and costs of transporting inmates
- Attract more business for economic development by utilizing video conferencing

XI. CENTURY DATE CHANGE

Application Description

The Commonwealth is faced with a very serious problem between now and the end of the century. Computer systems that aide in the daily functions of government will begin to fail or — worse — they will give erroneous information without notification of failure. This will occur because the century ("19") will be missing from dates in these processes.

During the '60's, '70's and '80's application development efforts focused on savings in time and space on the computer. This translated into monetary savings because of the extremely high cost of computer equipment and computer run time. Most systems were developed by taking advantage of eliminating the space consumed by always recording "19" as the century. The life span of these systems was predicted to be no more than ten years, and the assumption was that they would all be redeveloped prior to the change of the century. That theory proved unfounded as some of those systems are more than twenty years old. Agencies established other priorities, decided that the life cycles could be extended, or faced budgets that couldn't be stretched to include systems redevelopment.

Systems whose processes do not contain the century designation will function improperly when processes such as calculations, projections, and comparisons are executed. Because of these types of operations, some systems will begin to fail prior to the year 2000. It is important that all systems be examined to determine (1) does the problem exist? (2) will failure occur prior to the year 2000, and if so, when?

There are computer software tools in the marketplace that significantly reduce the cost to examine systems for problems, help determine when changes must occur, and aid significantly in accomplishing the modifications. With this type of functionality, systems can be prioritized, methodologies for each system can be established, and personnel resources can be scheduled. The solution to the problems is usually accomplished by: leaving the data in the same format and changing the computer code — a short term solution; changing the data format and altering the computer code — a long term solution that does not provide additional enhancements; or redeveloping the system — a long range solution that can also provide many enhancements and additional benefits.

An impact assessment on current systems and programs will be performed, priorities will be established, methodologies will be chosen, and solutions will be implemented.

Costs

	<u>FB 96-98</u>
Systems Design and Implementation	12,151,000
Software Tools	500,000
On-going Operational Maintenance	
contract for software tools	75,000
TOTAL*	12,726,000

* Based on system modifications without redevelopment. These costs can be substantially reduced if the systems are redeveloped <u>before</u> processing of data is affected by the Century Date Change. Costs were derived by using the current industry standard rate for changing the number of lines of program code (courtesy of the Gartner Group).

Benefits

Systems that are redeveloped prior to their projected date of failure can be eliminated from this initiative thus reducing the cost accordingly.

I	Agriculture	N/A
II	Business Permitting and Licenses	N/A
III	Health Care Services	167,000
IV	Families and Children	1,024,000
V	Tax Systems	2,292,000
VI	Integrated Justice System	518,000
VII	Financial Management System	2,642,000
VIII	One-Stop Job Services	520,000
IX	Geographic Information Systems	N/A
X	Kentucky Telelinking Network	N/A
XI	Century Date Change	N/A
XII	Motor Vehicle System	N/A
XIII	Statewide 800MHZ Digital Radio	N/A
	TOTAL	7,163,000

XII. MOTOR VEHICLE SYSTEM

Application Description

The motor vehicle titling, registration, and ad valorem system has exceeded its original life expectancy. Legislative mandates, changing administrative procedures, and other outside system influences have made it very difficult and costly to make modifications and extremely hard to manage operationally. Functions within the system are not clearly delineated, causing operation and communication problems that span all of the user entities.

The primary functions of the system are titling, registration, and ad valorem tax collection for motor vehicles and boats; enforcement of vehicle emission standards; provide tracking information for law enforcement; and provide location information for child support enforcement. The Transportation Cabinet, Revenue Cabinet, County Clerks, and Property Valuation Administrators comprise the primary users. This group also, provides valuable input to the management process. Many local, state, and federal agencies regularly access the system to support mandated functions within their areas of jurisdiction.

A contract has been awarded to perform a business process reengineering study for areas in the user organizations, and a requirements analysis and general design for a new system. Recommendations from the business process reengineering study will be interfaced with the requirements gathering to form the basis for the general design of a new system. A subsequent contract, which has been included in the biennial budgets of the Transportation and Revenue Cabinets, will cover the detail design and implementation of the new system.

Costs

	<u>FB 96-98</u>
Systems Design and Implementation	12,866,000
Capital Equipment	4,140,000
TOTAL	17,006,000

The reengineering process is in progress and \$980,000 was funded for fiscal year 1996 for this effort by the 1994 General Assembly (bond fund).

- The Motor Voter process will be simplified and expedited for the citizens of the Commonwealth
- Improved interfaces and newly developed business systems within the local government offices will enhance user capabilities, standardize procedures across the state, and lower the cost of system maintenance and modifications
- Electronic interfaces will enhance the ability to deliver timely and accurate data to law enforcement personnel and the federal government
- The cost to make the system compliant with the century date change will be virtually eliminated

XIII. STATEWIDE 800 MEGAHERTZ DIGITAL RADIO SYSTEM

Application Description

This system is to provide integrated wireless communications for state and local government public safety related agencies. This includes the establishment of a digital interactive two-way radio network system, including both mobile and portable units, to allow immediate voice, data, and image communications within and among public safety agencies in the state. Such agencies range from the Kentucky State Police, Transportation Cabinet, and Division of Disaster and Emergency Services (DES) to local fire, police, and sheriffs' departments, and school bus transportation. Also included would be emergency medical units, Fish and Wildlife offices, mine safety offices, and the National Guard. It is also intended that this system be Kentucky's link to the National Law Enforcement Public Safety Network being developed by the Federal Government. Implementation of this system would, for the first time, provide direct communication between the various state and local agencies.

The system would be phased in over three biennia. It includes infrastructure equipment to allow statewide digital transmission for user agencies (e.g., microwave transmission equipment, base stations, network management equipment) and user agency equipment to allow agencies to operate wireless digital transmission communications (e.g., mobile radios, mobile computer terminals, vehicular repeaters, RF control stations, dispatch center equipment). This funding will provide user agency equipment only for the Department of State Police and DES; other state and local public safety agencies could purchase the necessary equipment and connect to the system as funds become available to them and as the implementation phase of the project passes through their areas.

The Finance and Administration Cabinet has issued a performance-based Request for Proposal for the 800 MHZ system which calls for an infrastructure for statewide use, equipment for State Police and DES, and establishment of a price contract for the 800 MHZ equipment, which would be available to all state agencies. It is cost-contingent. The winning vendor would install pilot systems, including one to be located at the Frankfort State Police post, to test the concept. There would be no up-front cost to the state. In the event the results of the pilot project were not acceptable, the vendor would remove the equipment and the contract would be canceled. The total cost of the project, \$125,000,000, includes payments for the pilot project installations, if the pilot is determined to be acceptable.

Costs

FB 96-98

Capital Outlay

42,000,000

- Provide direct statewide radio communications capability between and among the various state and local public safety agencies
- Reduce response time for medical emergencies, fires, hazardous spills, and other natural disasters
- Minimize or eliminate redundant purchases of radio systems that may be incompatible
- Coordinate disaster recover by state and local agencies
- Extend 911 information to responding agents
- Integrate public safety resources
- Improve public safety services
- Provide effective statewide radio management, implementing common communication management practices

•	Allow economies of scale for small agency and local government purchases

SUMMARY

The EMPOWER KENTUCKY initiative and its emphasis on reengineering, efficient use of business systems by government, and appropriate access to modern technology is unparalleled in the Commonwealth. The plan must be launched immediately -- it should have been initiated years ago. It is dependent upon a continuing partnership between the Executive and Legislative Branches of government and state employees on the front line. Its rewards can be enormous and its costs are not inconsiderable. But such a change is necessary, inevitable, and ultimately valuable, if Kentucky state government is to be capable of delivering public services and results at affordable costs.